

ENVIRONMENTAL PLANNING ECOSYSTEM RESTORATION AUTHORITIES

“Walking the talk”

Ch 7 Module 2
HO Cap Brochure



Student Learning Objectives

- Philosophy
- Present Brief History of Environmental Change in the Planning Process
- Describe Corps ecosystem restoration authorities.
- Identify the limitations of these authorities
- Describe appropriate cost sharing and policies.



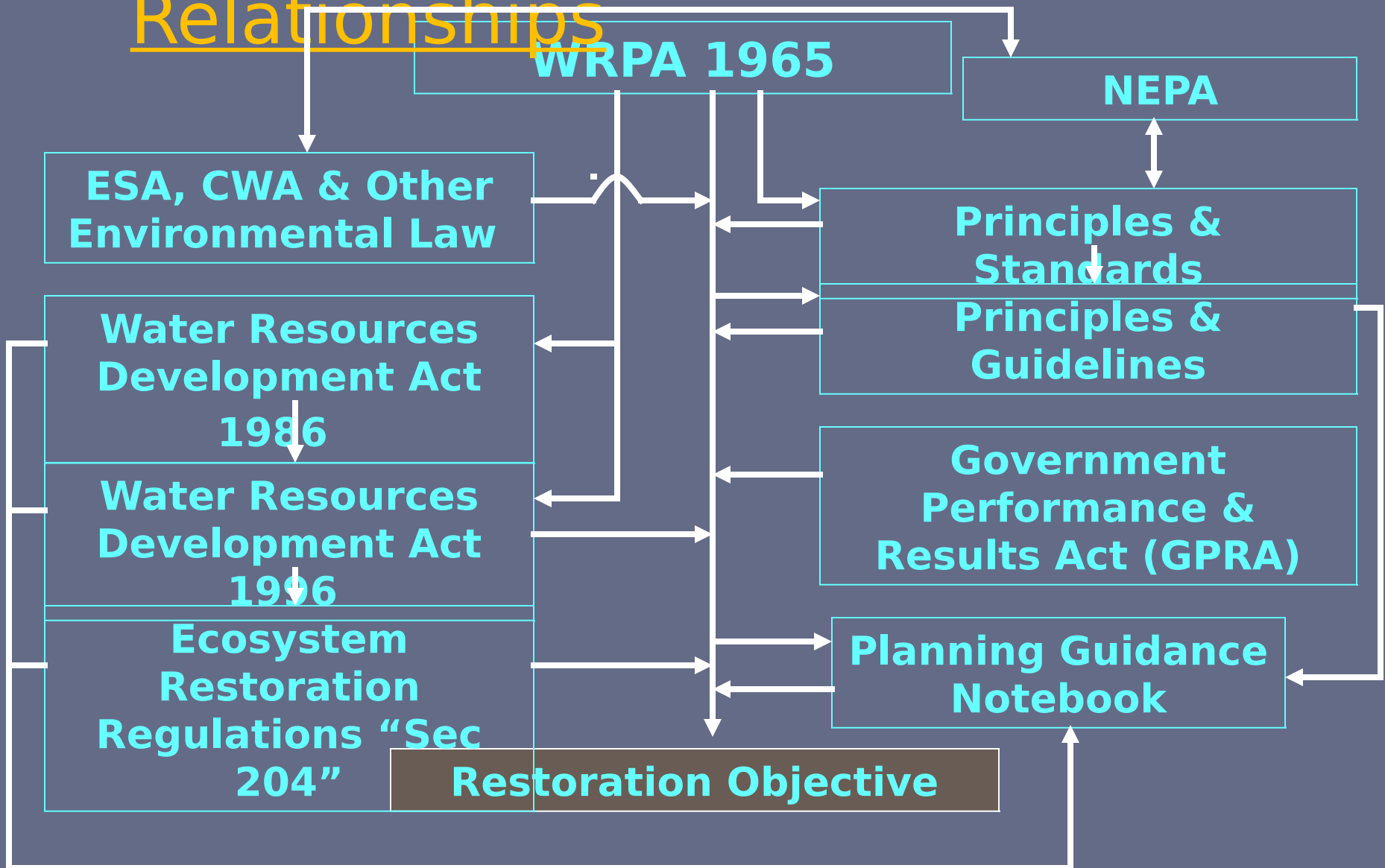
Philosophy

- The Corps will promote environmental values as defined in the Environmental Operating Principles.
- The principles are consistent with the National Environmental Policy Act, the Army Strategy for the Environment with its emphasis on sustainability, other environmental statutes, and the Water Resources Development Acts that govern Corps activities.

Philosophy

- Strive to achieve environmental sustainability by seeking a balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
- Guidance is undergoing continued development and is reflective of “greening trend” that’s been in place years.

Legal/Policy/Regulatory Relationships

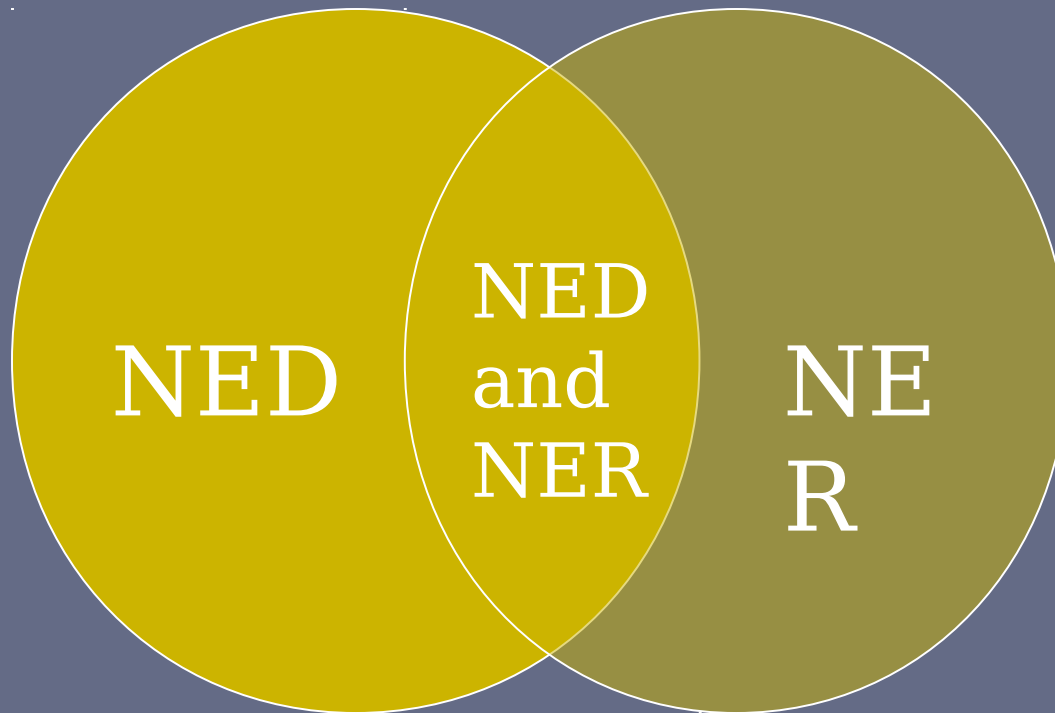


Ecosystem Restoration Objective

- ▶ Restore degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition.
 - Improve or re-establish structural components and functions of natural areas.
 - Mimic, as closely as possible, conditions, which would occur in the area in the absence of human changes to the landscape and hydrology.

“The Circles of Life”

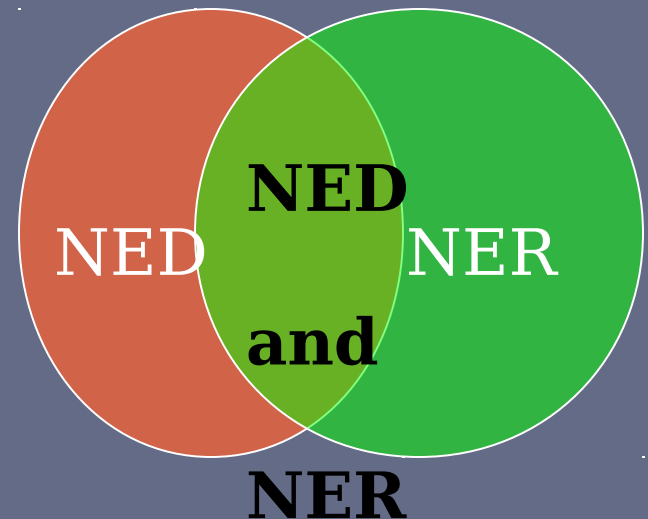
(EC 1105-2-404 May 2003)



Functionally and/or Physically Interdependent

With trade-offs

- Forego one type of output to produce another type.
- Significant issue with agencies and sponsors.
- All trades allowed.
- Benefits of each purpose should equal or exceed separable costs.



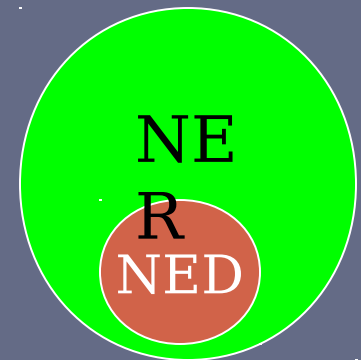
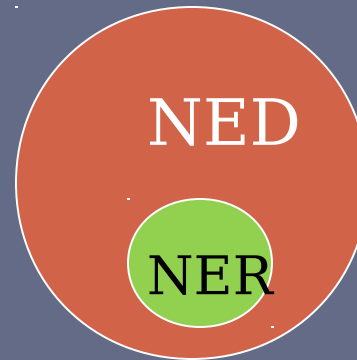
Functionally and Physically Independent

- Each purpose independently optimized and justified
 - NED = maximize net benefits.
 - NER = cost effective & incrementally justified.
 - Plans do not rely upon each other for success.
- ✱ Each purpose requires authorization-“other associated purposes”



Functionally and/or Physically Interdependent

- Without trade-offs
 - Modify one purpose to produce other outputs.
 - Primary purpose is justified.
 - Incremental investment, if any, is justified.



Concept

- Intended to encourage plan formulation for economic and environmental benefits.
- Significance of NER outputs must be clear.
- Allows environmental features to be added to a project consistent with sponsor support and project authority.
 - Supported by NED benefits
 - Sponsor willing to cost share
 - Must have authority to add project purpose
- Must demonstrate that combined plan is better than achieving purposes separately

Ecosystem Restoration Authorities

- Specifically authorized studies- General Investigation (GI) requiring specific Congressional Direction- the WRDAs.
- Programmatic authorities- Existing authorities within the Corps of Engineers- the Continuing Authorities Program (CAP)

Specifically Authorized Studies/Projects

- ❑ Single purpose.
- ❑ Multiple purpose.
- ❑ Review of completed projects.
- ❑ Study Cost Sharing – 50/50. (Recon 100%)
- ❑ Construction cost sharing – 65%/35%, Non-Fed, includes lands.
- ❑ Four Phase Program: Recon, Feasibility , Planning Engineering & Design (PED) & Construction

CAP or Programmatic Authorities

- Single Purpose
- Multiple purpose
- Modification of completed Projects
- Project Cost Sharing 25-35%
 - Feasibility costs beyond \$100K is cost shared at 50/50.
- Two phase program.
 - Feasibility
 - Design & Implementation

Ecosystem Restoration: Related Concepts

- Enhancement - not restoration.
- Rehabilitation - **true restoration.**
- Conservation – not restoration.
- Protection – not restoration.
- Preservation – not restoration.
- Mitigation – not restoration.
- Remediation-relates to clean up not restoration

Evolution of Ecosystem Mission Authority

- WRDA 86
 - First legislation targeting ecosystem restoration
 - Section 1135 – Project Modifications for Improvement of Environment
 - Authorized **review of water resources projects** for the purpose of modifications for improving quality of the environment
 - Two year demonstration program!
 - Related in concept to Section 216 FCA 1970

Evolution of Ecosystem Mission Authority

- WRDA 88
 - Section 41 – Extended 1135 Environmental Demonstration Program to 5 yrs
 - Section 45 – Authorized the Des Plaines River Wetlands Restoration Demonstration Project
 - Section 46 -Authorized and expanded the Kissimmee River, Florida demonstration project originating from an initial 1135 authorization
 - Show case project !

Evolution of Ecosystem Mission Authority

- WRDA 90
 - Added ecosystem restoration to the 1948 Kissimmee River flood control project.
 - Converted the Section 1135 Demo Program to a \$15M annual program
 - Added Environmental Protection as one of the Corps Primary Missions
 - Established interim Goal of No-Net Loss for Wetlands
 - Authorized Environmental Dredging for Navigable waters

Evolution of Ecosystem Mission Authority

- WRDA 92
 - Authorized \$427M for the Restoration of Kissimmee River FDR Project
 - Increased the 1135 Program level to \$25M & established a \$5M project limit for 1135 and
 - Established the use of Beneficial



Sonoma Baylands, CA - *before*

Evolution of Ecosystem Mission Authority

- WRDA 96
 - Authorized Anacostia River and Tributaries, District of Columbia and Maryland as the first project planned solely for ecosystem restoration
 - Modified Sec 1135 to include **other locations affected by construction**
 - Added remediation to Sec 312 (WRDA 90)
 - **Established Section 206 Aquatic Ecosystem Restoration**

Evolution of Ecosystem Mission Authority

- WRDA 96 (cont)
 - Authorized the Secretary of the Army to develop and implement projects for the purpose of restoring, preserving, and protecting the South Florida ecosystem.
 - Authorized Poplar Island, Maryland as 1st major use of dredged material (\$307 million)
 - Added “Watersheds and Ecosystems” to the Planning Assistance to the States Program authorized under Sec 204 (WRDA 92)

THE ROLE of the WRDAs

- WRDA 99
 - Extended future of large scale projects and established credit/reimbursement for past/future activities, adopted 7 in-kind credits identified in the Everglades and South Florida Ecosystem Restoration Project
 - Added nonprofits as non-Fed sponsors for Small Aquatic Ecosystem Restoration Projects
 - Made the Upper Mississippi River Environmental Management Program permanent from origins in WRDA 86 related to Lock and Dam 26

The Role of the WRDAs

- WRDA 2007
 - Section 2020 – Adds Estuaries to Section 206 and increases program limit to \$50M. Adds dam removal as a restoration option.
 - **Section 2024** -- Increases program limit of Section 1135 to \$40M
 - **Section 2036** – Requires success criteria for monitoring plan. Adds mitigation bank options for mitigation planning
 - **Section 2037** - Requires the Secretary to develop regional sediment management plans.
 - **Section 2039** Monitoring- Increases project cost horizon from 5 years to 10 years

Programmatic Authorities

- ▶ Section 1135-Project modification for improvement of the environment WRDA 86
- ▶ Section 206-Aquatic Ecosystem Restoration. WRDA 96
- ▶ Section 204/207-Beneficial use of dredged material. WRDA 92

Ecosystem Restoration Authorities

“Getting Started”

- **Sponsor Request**: The Corps reviews the Sponsor's request to determine if it fits within existing authorities.
- **Review of Authorities**: Reviews determine potential application to solve the problem.
 - Continuing Authorities Program (CAP): District requests funds to initiate feasibility effort. (Any excess over \$100K is cost shared).
 - Congressional Adds-reality of CAP program.

Project Modification for Improvement of the Environment Section 1135 of WRDA 1986

- Purpose
 - Modify Corps' projects to improve environment.
- Constraint
 - Consistent with authorized project purposes
- Non-Federal Cost-Sharing
 - 25 % of the implementation including lands, easements, rights-of-way, relocations, and disposal areas (LERRD)
 - 100 % of operation and maintenance (OMRR&R).
 - 80 % of the non-Federal share may be work in kind

Aquatic Ecosystem Restoration Section 206 of WRDA 1996

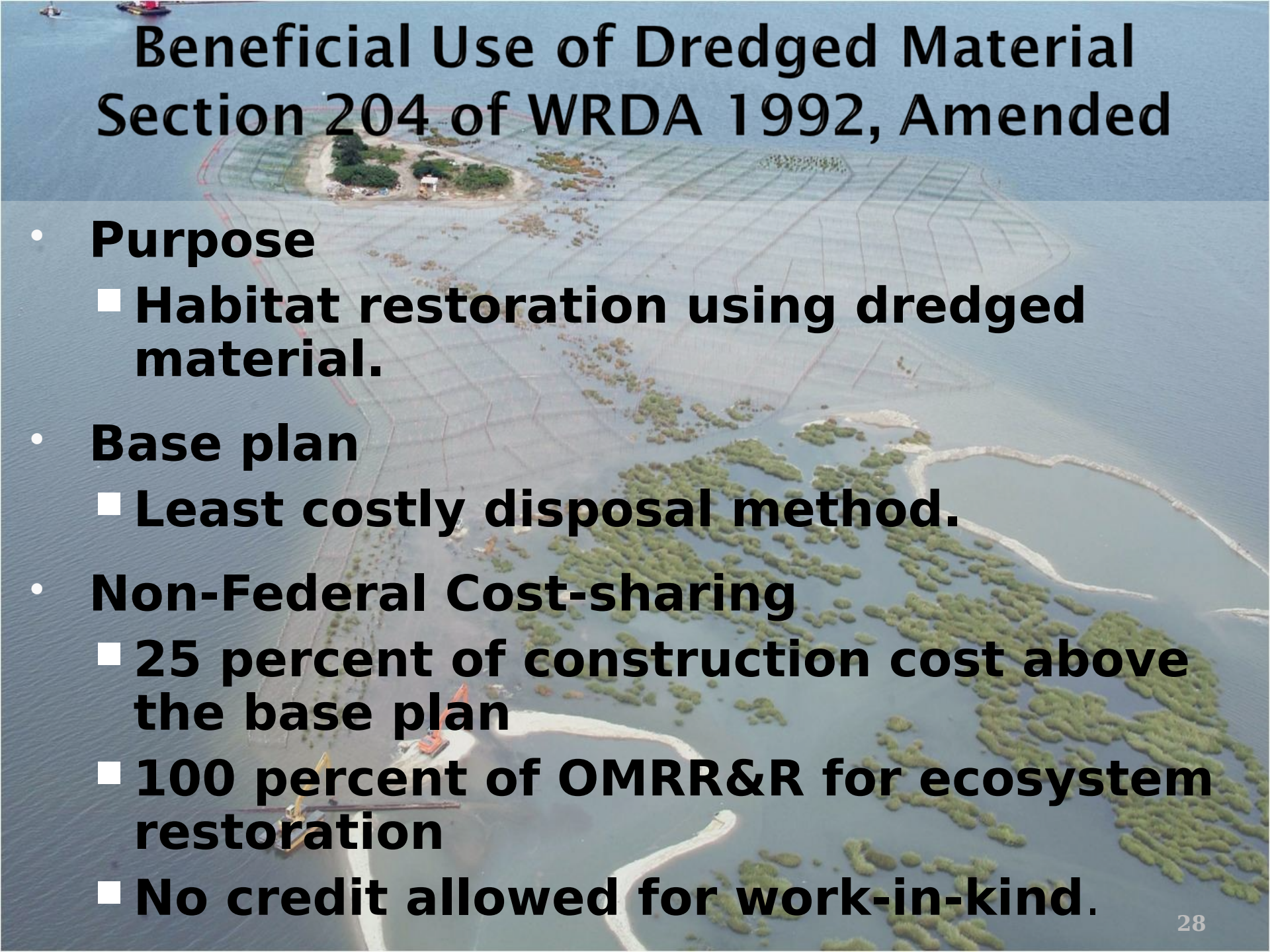


- ❑ **Purpose**
 - ❑ Aquatic/Estuarine ecosystem restoration.

- ❑ **Non-Federal Cost-Sharing**
 - 35 percent of the cost of implementation which includes lands, easements, rights-of-way, relocations, and disposal areas.
 - 100 percent of OMR&R.
 - 100 percent of

Beneficial Use of Dredged Material

Section 204 of WRDA 1992, Amended



- **Purpose**
 - **Habitat restoration using dredged material.**
- **Base plan**
 - **Least costly disposal method.**
- **Non-Federal Cost-sharing**
 - **25 percent of construction cost above the base plan**
 - **100 percent of OMRR&R for ecosystem restoration**
 - **No credit allowed for work-in-kind.**

Beneficial Use of Dredged Material

Section 207 of WRDA 1996

- For Navigation Projects;
 - Authorizes selection of disposal method that is not the least costly.
- Can be used without additional authority if opportunity presents itself after feasibility report finished but construction not completed.
- Can be used in maintenance dredging where the incremental costs of beneficial disposal exceed appropriation limits of 204 authority.

Environmental Dredging

Section 312 WRDA 1990

► Purpose

- Removal and remediation of contaminated sediments from navigable waters.
- Applies to non-CERCLA sites.

► Non-Federal Cost-Sharing

- Normal O&M project cost sharing when project related.
- 35% when not project related & in navigable waters.

Federal Funding Limits

Authority	Project	Annual
Section 1135	\$5 million	\$40 million
Section 206	\$5 million	\$50 million
Sections 204	none	\$15 million
Section 312	none	\$20 million
GI	none	none

Policy Considerations

- The project should restore ecosystem structure, functions and values.
- The project should improve environmental quality.
- The improvement should be of great enough national significance to justify federal expenditure.
- Restoration approach is on the manipulation of site hydrology and geomorphology.
- Delineation between riparian and “upland” terrestrial habitats marks the policy limit for Corp action.

Policy Considerations

- The sum of all monetary and non-monetary benefits should exceed the sum of all monetary and non-monetary costs.
- The measures taken to improve environmental quality should result in a more naturalistic and self-regulating system.
- The measures should reestablish to the extent possible a close approximation of documented preexisting or historic conditions prior to human intrusion. Issue of shifting baseline!

Policies Highlights

- **Ecosystem restoration is a priority mission.**
- True restoration should avoid need for mitigation.
- Land acquisition is not preferred approach in an of itself.
- Water quality issues occur when issue is pollution abatement.
- Mitigation for F&W impacts is not consistent with policy.

Policies Highlights

- Recreation is not an objective but may be part of the project.
- **Monitoring and adaptive management are limited project components.**
- Applying Corps' expertise is the goal.
- Natural sustainability preferred



Take Away Points

- Ecosystem Restoration has unique policy guidance
- Program utilizes non-monetary justifications
- There are many authorities
- The Corps' ecosystem restoration policy focuses on manipulating landscape hydrology and geomorphology.